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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ABRISHAMKAR, KAVEH

ART UNIT	PAPER NUMBER
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2431

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/980,503	Applicant(s) BOREL, JEAN-PHILIPPE	
	Examiner KAVEH ABRISHAMKAR	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on July 1, 2009. Claims 1, 3-6, and 10 were previously pending consideration. Per the received amendment, claims 11 and 12 are added.
2. Claims 1, 3-6, and 10-12 are currently pending consideration.

Response to Arguments

3. Applicant's arguments filed July 1, 2009 have been fully considered but they are not persuasive for the following reasons:
4. Regarding claims 1, the Applicant argues that the Cited Prior Art (CPA), Gurantz (U.S. Patent 5,936,660) in view of Ushiyama (U.S. Patent 6,349,140), does not teach at least two management means that drive the conversion of scrambled signals and obtain respective control messages for converting the signals from an access control module. This argument is not found persuasive. Ushiyama teaches a system with a parent unit and a child unit (see Ushiyama: Abstract). Both the parent and the child unit are capable of requesting a channel via a channel command signal (Ushiyama: column 4, lines 7-11). In response to this command signal, sent by either the parent or the child, a signal a (control message) is sent to the parent unit and a second signal b (control message) is sent to the child unit (Ushiyama: column 9, lines 10-16). Therefore, it is

Art Unit: 2431

asserted that the CPA does teach obtaining respective control messages for converting the signals.

5. Furthermore, the Applicant argues that the CPA does not teach two descrambling units. Regarding claim 1, Applicant further argues that the CPA does not teach employing a plurality of descrambling modules. This argument is not found persuasive. Gurantz discloses a converter box which feeds a signal which is fed into converter units (descrambling units) which each have independent tuner/demodulator/decompression/modulator units (Gurantz: column 4, lines 25-34). These independent units are interpreted as the descrambler units because they perform a descrambling function of taking an image which is not viewable (scrambled), and tunes, demodulates, and decompresses it, so it can be output as viewable (descrambled) video (Gurantz: column 4, lines 25-34). The Applicant further argues that descrambling should be interpreted as including decrypting signals (Remarks/Arguments: page 9, paragraph 2). The Examiner does not agree with the Applicant's statement that the plain meaning of descrambling is decrypting. The Applicant is correct that descrambling may include decrypting signals, but it is not limited to decryption. Descrambling is interpreted as taking a scrambled or unviewable signal, and processing the signal to provide a viewable or unscrambled image. The claim does not state anything about an encryption key, or anything else which would explicitly limit the descrambling function to decryption. Furthermore, the Applicant points to the specification as providing support for the assertion that the descrambling should be given the decryption definition. However, there is no mention of decryption or

Art Unit: 2431

encryption in the specification, and there is no statement limiting descrambling to being decryption. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., decryption) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. Regarding claim 10, the Applicant argues that the CPA does not teach a plurality of descrambler devices. That is not found persuasive. Gurantz discloses RF modulation units which are interpreted as the descramblers because without the RF modulation units, the televisions would receive an unviewable image (Figure 3, column 4, lines 18-45). The same arguments pertaining to the relationship between descrambling and decrypting given above applies to this claim 10. Therefore, the argument is not found persuasive.

7. Regarding newly added claims 11 and 12, a new reference, Matsuzaki et al. (U.S. Patent 6,289,314), is introduced.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Gurantz (U.S. Patent 5,936,660).

Regarding claim 10, Gurantz discloses:

A pay-per-use communication device comprising:

a tuner device, said tuner device having a tuner device output (Figure 3, column 4 lines 18-45);

a demodulator device, said demodulator device having a demodulator device input operatively coupled to said tuner device output and a demodulator device output (Figure 3, column 4 lines 18-45);

a demultiplexer device, said demultiplexer device having a demultiplexer control input and a demultiplexer device input, said demultiplexer device input being operatively coupled to said demodulator device output, said demultiplexer device including a plurality of descrambling devices, said plurality of descrambler devices having a respective plurality of descrambler device outputs (Figure 3, column 4 lines 18-45), wherein the demultiplexer is the splitter which split into different signals, and the descramblers being interpreted as the RF modulation units because without the RF modulation the televisions would only receive a scrambled signal;

a plurality of decoding block devices, said plurality of decoding block devices including a respective plurality of decoding block device inputs, said plurality of decoding block device inputs being respectively operatively coupled to said plurality of

Art Unit: 2431

demultiplexer device outputs (Figure 3, column 4 lines 18-45), wherein the decompressing units are interpreted as the decoding devices; and

a controller device, said controller device having a controller device output, said controller device output being operatively coupled to said demultiplexer control input (Figure 3, column 4 lines 18-45), wherein the control unit is the access control unit.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurantz (U.S. Patent No. 5,936,66) in view of Ushiyama (U.S. Patent No. 6,349,140).

Regarding claim 1, Gurantz discloses:

A pay-per-use communication device, in particular for television pictures. Gurantz discloses

“at least two input interfaces for receiving first and second scrambled signals bearing information subject to pay-per-use” (Figure 3 item 102, column 4 lines 3 – 17, column 4 lines 27-47), where the scrambled signal is received from a cable drop or

Art Unit: 2431

other video source and is received at one of multiple tuners and wherein a plurality of scrambled signals are received at a plurality of converter boxes at a household premises and transformed into unscrambled signals which are sent to a plurality of television sets,

“first and second processing pathways having respective first and second descrambling modules able to undertake the conversion of the first and second scrambled signals via selected ones of the first and second descrambling modules, and provide the descrambled signals to at least two output interfaces” (Figure 3 item 102, column 4 lines 3 – 17, column 4 lines 27-47), where the scrambled signal is received from a cable drop or other video source and is received at one of multiple tuners and wherein a plurality of scrambled signals are received at a plurality of converter boxes at a household premises and transformed into unscrambled signals which are sent to a plurality of television sets,

“An access control module able to cooperate with a memory card for conditioning the operation of the first and second processing pathways” (Figure 3 item 110 and item 116, column 3 lines 16-27) where a conditional access unit (access control module) is used in conjunction with a smart card (memory card) to store user access entitlements, and

Gurantz does not explicitly disclose “first and second processing pathways **comprising first and second management means for driving the conversions of the first and second scrambled signals**, and in **that first management means is arranged to communicate with the access control module to obtain a first control**

Art Unit: 2431

message for converting the first scrambled signals, and the second management means is arranged to communicate with the access control module by way of the first management means to obtain a second control message for converting of the second scrambled signals.” Ushiyama teaches a system wherein scrambled signals are received and output as descrambled signals to a plurality of televisions (Figure 4). There are at least two different subscriber terminal units (converter boxes), which operate in a master/slave relationship. The two boxes are both capable of requesting channels (column 4 lines 4-39), though the request is relayed through the master box, and therefore, both have their own management means. Regarding the respective control messages, Ushiyama teaches a system with a parent unit and a child unit (see Ushiyama: Abstract). Both the parent and the child unit are capable of requesting a channel via a channel command signal (Ushiyama: column 4, lines 7-11). In response to this command signal, sent by either the parent or the child, a signal a (control message) is sent to the parent unit and a second signal b (control message) is sent to the child unit (Ushiyama: column 9, lines 10-16). Gurantz and Ushiyama are analogous arts as both pertain to receiving a scrambled television signal and descrambling the signal before distributing it to a plurality of television sets. Using two management systems as disclosed in Ushiyama would be beneficial in an environment of Gurantz because, as Ushiyama states, it provides a system “allowing the user to see pay channel programs with a plurality of TV receivers or the like in the house of the subscriber at a moderate cost” (column 2 lines 6-10) and further provides the capability of a user in a different room to view request and view a pay channel without being

Art Unit: 2431

doubly charged (column 1 lines 46-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the at least two management means of Ushiyama in the descrambling environment of Gurantz to achieve the cost benefits and flexibility of requesting pay channels at any room in a building.

Claim 3 is rejected as applied above in rejecting claim 1. Gurantz does not explicitly disclose “the first management means are devised, on the one hand, to receive from the access control module, at predetermined time intervals, first and second control messages, for the respective conversions of the first and second scrambled signals, and, on the other hand, to transmit the said second control messages to the second management means.” Ushiyama teaches a system wherein scrambled signals are received and output as descrambled signals to a plurality of televisions (Figure 4). There are at least two different subscriber terminal units (converter boxes), which operate in a master/slave relationship. The two boxes are both capable of requesting channels (column 4 lines 4-39), though the request is relayed through the master box, and therefore, both have their own management means. Gurantz and Ushiyama are analogous arts as both pertain to receiving a scrambled television signal and descrambling the signal before distributing it to a plurality of television sets. Using two management systems as disclosed in Ushiyama would be beneficial in an environment of Gurantz because, as Ushiyama states, it provides a system “allowing the user to see pay channel programs with a plurality of TV receivers or the like in the house of the

Art Unit: 2431

subscriber at a moderate cost” (column 2 lines 6-10) and further provides the capability of a user in a different room to view request and view a pay channel without being doubly charged (column 1 lines 46-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the at least two management means of Ushiyama in the descrambling environment of Gurantz to achieve the cost benefits and flexibility of requesting pay channels at any room in a building.

Claim 4 is rejected as applied above in rejecting claim 3. Furthermore, Gurantz discloses:

Device according to claim 3, wherein “the first and second management means respectively comprise a first and a second processor, which are devised so as to respectively drive first and second descrambling modules for descrambling the first and second scrambled signals” (Figure 3, column 4 lines 4 - 48), where a plurality of scrambled signals are received at a plurality of converter boxes at a household premises and transformed into unscrambled signals which are sent to a plurality of television sets.

Claim 5 is rejected as applied above in rejecting claim 4. Furthermore, Gurantz discloses:

Device according to claim 4. Gurantz does not explicitly disclose “the first processor is able to drive the second processor according to a protocol of the

Art Unit: 2431

master/slave type.” Ushiyama does disclose “a first processor driving a second processor according to a master/slave type protocol” (Figure 4, column 2 lines 26 - 50), where Ushiyama discloses a parent subscriber unit terminal (master) comprising a control unit which controls the switching of the descrambled information descrambled by the descrambling units of the parent (master) or the child (slave) units. Gurantz and Ushiyama are analogous arts as both pertain to receiving a scrambled television signal and descrambling the signal before distributing it to a plurality of television sets. The master/slave protocol used in Ushiyama would be beneficial in an environment of Gurantz because, as Ushiyama states, the master/slave relationship provides a system “allowing the user to see pay channel programs with a plurality of TV receivers or the like in the house of the subscriber at a moderate cost” (column 2 lines 6-10) and further provides “an information receiving system for allowing the number of subscriber terminal units controlled by a center to be decreased, thereby reducing the load of the processing performed by the center” (column 2 lines 1 - 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the master/slave relationship of Ushiyama in the descrambling environment of Gurantz to achieve the cost benefits and the reduced load of the processing performed by the distribution center provided by this relationship.

Claim 6 is rejected as applied above in rejecting claim 4. Furthermore, Gurantz discloses:

Device according to claim 4, wherein “the first and second input interfaces are

Art Unit: 2431

linked to means for receiving radio frequency waves” (column 2 lines 35-43), where the input interfaces can receive signals from a cable drop or a satellite (RF waves), and in that

“The first and second processing pathways respectively comprise frequency converters each adapted to a polarization of the radio frequency waves transmitted by a satellite” (Figure 3 items 104, 106, 108, column 4 lines 19-48), where the signal is received by the tuner, then demodulated, decompressed, modulated and sent to a plurality of television sets.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurantz (U.S. Patent No. 5,936,66) in view of Ushiyama (U.S. Patent No. 6,349,140) in further in view of Matsuzaki et al. (U.S. Patent 6,289,341).

Claim 11 is rejected as applied above in rejecting claim 1. Gurantz and Ushiyama are silent on the first and second access control messages performing cryptographic operations. Matsuzaki, in an analogous art, discloses a system which sends a random number (access control message) which is encrypted to the terminal which decrypts the random number and then uses it to descramble the received information (pay information) by using the decrypted random number (column 7, line 35 – column 8, line 23). It would have been obvious to use the access control messages to perform cryptographic operations so that it is possible to more safely distribute information to a specific terminal (Matsuzaki: column 8, lines 19-23).

Art Unit: 2431

Claim 12 is rejected as applied above in rejecting claim 11. Furthermore, Matsuzaki discloses that the first and second access control messages depend on a single descrambling key and conditional access control messages (column 7, line 35 – column 8, line 23). The access control message comprises a random number which is decrypted by a single key and used to descramble the scrambled pay information (column 8, lines 14-23). Therefore, it depends on a single key (random number) and conditional access control messages (encrypted random number).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2431

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAVEH ABRISHAMKAR whose telephone number is (571)272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kaveh Abrishamkar/
Primary Examiner, Art Unit 2431

/K. A./
11/03/2009
Primary Examiner, Art Unit 2431